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EXAMINER

BALI, VIKKRAM

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SUPPLEMENTAL EXAMINER ANSWER

In response to the applicant Reply to examiner's answer the supplemental examiner answer follows:

Claim 1.

Regarding the Inherency as new grounds as argued by the applicant. Examiner would like to point out that there is no rejection in the prior office action as alleged by the applicant. Examiner did not consider the "Inherency" in the rejection rather examiner pointed out that the "high speed imaging" as claimed in claim 1, does use the CCD imaging device as specification calls for the imaging device as CCD (see specification page 10 lines 5-9) for imaging the substrate, and the reference O'Boyle does use the CCD as the imaging device.

Regarding the new grounds of rejection, the applicant argues the reference fails to disclose the "determining layer thickness while polishing". Examiner would like to point out that the subject matter of "determining layer thickness while polishing" is not claimed. The claimed limitation of "determining the thickness during the CMP" is met by the reference and the arguments are present in the initial examiner answer filled 6/16/2004.

Therefore, the rejection of claim 1 stands.

Claim 7

Claim 7 depends from claim 1 therefore, all the arguments set forth for claim 1 does apply here also.

Regarding the new grounds of rejection, the applicant argues the O'Boyle fails to disclose the "pixel conversion". Examiner would like to point out that the limitation is taught by Bibby in col. 7 lines 20-27, wherein it states that the image is made up pixels therefore, the image is converted in to the pixel and then the pixel values are use to get the thickness is disclose by the O'Boyle in col. 4 line 66 through col. 5 lines 2, where it states that the pixel values are use to get to the thickness via a spectrum, the spectrum is just a process step in the entire method.

In addition, applicant argues that the "combination of O'Boyle and Bibby is improper". In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. In this case, reference of O'Boyle discloses the invention substantially as described in the action and also as defended above in the response to the arguments for claim 1. However, the reference Bibby was only introduce to show that the image is the make up of number of pixels as detailed in the col. 7, lines 22-24, and therefore, the limitation of claim 7, "converting pixels of the acquired image to the layer thickness" is met.

Therefore, the rejection of claim 7 stands.

Claim 8

Regarding the rejection of claim 8. The term "in situ" was read as was define in the Webster. Applicant argues and give lengthy reasoning that the in situ as disclose is not the CMP process to its entirety, but a step of the CMP process, therefore, the rejection should be withdrawn. But, the claims are claiming the "**CMP**" emphasis added. And, therefore, the rejection stands.

Claim 9

The limitation argued by applicant is same as the limitations as argued by the applicant in claims 1 and 8. Therefore, the arguments given by the examiner apply. And, therefore, the claim 9 stands rejected.

Claim 15

The limitation argued by applicant is same as the limitations as argued by the applicant in claim 1. Therefore, the arguments given by the examiner apply.

Examiner fails to see a new allegation regarding the motivation to combine the references. Because the motivation as given in the final rejection paper number 6 is same as the motivation given in the examiner answer dated 6/16/2004.

Claims 23-28

The limitation argued by applicant is same as the limitations as argued by the applicant in claim 15. Therefore, the arguments given by the examiner apply. And, therefore, the claims 23-28 stand rejected.

Claim 21

Claim 21 depends from claim 15 therefore, all the arguments set forth for claim 15 does apply here also. In addition, applicant argues that the reference "combination of O'Boyle and Bibby is improper", as argued in claim 7 arguments. Examiner disagrees and would like to bring the attention to the section for claim 7 above for responding to the arguments of claim 7.

Claim 22

Claim 22 depends from claim 15 therefore, all the arguments set forth for claim 15 does apply here also. In addition, applicant argues that the reference of "O'Boyle does not teach In Situ thickness determination as claimed", as argued in claim 8 arguments. Examiner disagrees and would like to bring the attention to the section above for responding to the arguments of claim 8.


For the above reasons, it is believed that the rejections should be sustained.

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Respectfully submitted,

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Primary Examiner
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VB
January 7, 2005

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